

**REMARKS**

In the final Office Action, the Examiner rejects claims 79-86, 94-103, 111, 112, and 116-119 under 35 U.S.C. § 103(a) as unpatentable over HOLT et al. (U.S. Patent No. 6,701,305) in view of BOWMAN et al. (U.S. Patent No. 6,006,225); and rejects claims 87-93, 104-110, 113-115, and 120-122 under 35 U.S.C. § 103(a) as unpatentable over HOLT et al. in view of BOWMAN et al. and LIDDY et al. (U.S. Patent No. 6,026,388). Applicants respectfully traverse the rejections.

By way of this amendment, Applicants amend claims 79, 81, 83, 86-91, 94-96, 98, 111, 112, 115, 118, and 119 to improve form and cancel claims 80, 97, 116, 117, and 120-122 without prejudice or disclaimer. No new matter has been added by way of the present amendment. Claims 79-96, 87-115, 118, 119, and 123-126 are pending.

**Rejection under 35 U.S.C. § 103(a) based on HOLT et al. and BOWMAN et al.**

Pending claims 79-86, 94-96, 98-103, 111, 112, 118, 119, and 123-126 stand rejected under 35 U.S.C. § 103(a) as unpatentable over HOLT et al. in view of BOWMAN et al. Applicants respectfully traverse this rejection.

Amended independent claim 79 recites a method that is performed by one or more server devices. HOLT et al. and BOWMAN et al., whether taken alone or in any reasonable combination, do not disclose or suggest one or more of the features recited in amended claim 79.

For example, HOLT et al. and BOWMAN et al. do not disclose or suggest forming, by one or more processors of the one or more server devices, a plurality of clusters of search documents, of the stored search query-search document associations, that match the identified set of search result documents; selecting, by one or more

processors of the one or more server devices, at least one of the plurality of clusters; and  
formulating, by one or more processors of the one or more server devices, a search query  
refinement suggestion based on an issued search query of a search query-search  
document association associated with a search document of the selected at least one of  
the plurality of clusters, as recited in amended claim 79.

HOLT et al. discloses a text data collection that “is represented by a term-by-document matrix having a plurality of entries with each entry representing the frequency of occurrence of a term in a respective document” (column 6, lines 16-19). HOLT et al. further discloses projecting a portion of the term-by-document matrix “into the lower dimensional subspace to create at least those portions of the subspace representation  $A_k$  relating to the term(s) identified by the query” (column 6, lines 46-52). HOLT et al. does not disclose or suggest forming a plurality of clusters based on the identified set of search result documents. Therefore, HOLT et al. does not disclose or suggest forming, by one or more processors of the one or more server devices, a plurality of clusters of search documents, of the stored search query-search document associations, that match the identified set of search result documents; selecting, by one or more processors of the one or more server devices, at least one of the plurality of clusters; and formulating, by one or more processors of the one or more server devices, a search query refinement suggestion based on an issued search query of a search query-search document association associated with a search document of the selected at least one of the plurality of clusters, as recited in amended claim 79.

BOWMAN et al. discloses “us[ing] the query term correlation data stored in the correlation table 137 to select the related terms that best match the user's query” and

“present[ing] the related terms to the user, allowing the user to refine the search and enhance discovery of relevant information” (column 6, lines 19-24). BOWMAN et al. does not disclose or suggest forming a plurality of clusters based on the identified set of search result documents. Therefore, BOWMAN et al. does not disclose or suggest forming, by one or more processors of the one or more server devices, a plurality of clusters of search documents, of the stored search query-search document associations, that match the identified set of search result documents; selecting, by one or more processors of the one or more server devices, at least one of the plurality of clusters; and formulating, by one or more processors of the one or more server devices, a search query refinement suggestion based on an issued search query of a search query-search document association associated with a search document of the selected at least one of the plurality of clusters, as recited in amended claim 79.

For at least the foregoing reasons, Applicants submit that claim 79 is patentable over HOLT et al. and BOWMAN et al., whether taken alone or in any reasonable combination.

Claims 80-86 depend from claim 79. Therefore, these claims are patentable over HOLT et al. and BOWMAN et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 79.

Independent claims 94-96, 111, and 112 recite features similar to features recited above with respect to claim 79. Therefore, claims 94-96, 111, and 112 are patentable over HOLT et al. and BOWMAN et al., whether taken alone or in any reasonable combination, for at least reasons similar to the reasons given above with respect to claim 79.

Claims 123 and 124 depend from claim 94. Therefore, these claims are patentable over HOLT et al. and BOWMAN et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 94.

Claims 118 and 119 depend from claim 95. Therefore, these claims are patentable over HOLT et al. and BOWMAN et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 95.

Claims 98-103 depend from claim 96. Therefore, these claims are patentable over HOLT et al. and BOWMAN et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 96.

Claims 125 and 126 depend from claim 111. Therefore, these claims are patentable over HOLT et al. and BOWMAN et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 111.

Accordingly, reconsideration of the rejection of claims 79-86, 94-96, 98-103, 111, 112, 118, 119, and 123-126 under 35 U.S.C. § 103(a) based on HOLT et al. and BOWMAN et al. is respectfully requested.

**Rejection under 35 U.S.C. § 103(a) based on HOLT et al., BOWMAN et al., and  
LIDDY et al.**

Pending claims 87-93, 104-110, and 113-115 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over HOLT et al. in view of BOWMAN et al. and LIDDY et al. Applicants respectfully traverse this rejection.

Claims 87-93 depend from claim 79; claims 104-110 depend from claim 96; and claims 113-115 depend from claim 112. Without acquiescing in the Examiner's rejection of claims 87-93, 104-110, 113-115, and 120-122, Applicants submit that the disclosure of

LIDDY et al. does not remedy the deficiencies in the disclosures of HOLT et al. and BOWMAN et al. set forth above with respect to claims 79, 96, and 112. Therefore, claims 87-93, 104-110, and 113-115 are patentable over HOLT et al., BOWMAN et al., and LIDDY et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claims 79, 96, and 112.

Accordingly, reconsideration of the rejection of claims 87-93, 104-110, and 113-115 under 35 U.S.C. § 103(a) based on HOLT et al., BOWMAN et al., and LIDDY et al. is respectfully requested.

### ***Conclusion***

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

As Applicants' remarks with respect to the Examiner's rejections overcome the rejections, Applicants' silence as to certain assertions by the Examiner in the Office Action or certain requirements that may be applicable to such assertions (e.g., whether a reference constitutes prior art, reasons for modifying a reference and/or combining references, assertions as to dependent claims, etc.) is not a concession by Applicants that such assertions are accurate or that such requirements have been met, and Applicants reserve the right to dispute these assertions/requirements in the future. To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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